AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0032] with the following amended paragraph:

[0032] Referring to FIG. 1, having selected 10 article 100, such as differential housing 200, method 1 comprises the additional step of selecting 20 an induction coil 300. Referring to FIGS. 6 and 7, induction coil 300 comprises a hollow metal channel 305 having a first termination portion 310, a second termination portion 315, and a semi-rectangular inductor portion 320 that is operably connected to the first termination portion 310 and the second termination portion 315. The semi-rectangular inductor portion 320 comprises a semi-rectangular lower coil portion 325 comprising a first L-shaped section 330 having a first termination end 335, that is connected to the first termination portion 310, and a first lower lateral end 340, and an opposed second L-shaped section 345 having a second termination end 350, that is connected to the second termination portion 315, and a second lower lateral end 353; a semi-rectangular upper coil portion 355 having a first upper lateral end 360 and a second upper lateral end 365, and that is located above and is proportionately smaller than the lower coil portion 325; a first lateral portion 370 that connects the first lateral end 360 of the upper coil portion 355 to the first lateral end 340 of the lower coil portion 325, and a second lateral portion 375 that connects the second lateral end 365 of the upper coil portion 355 to the second lateral end 353 of the lower coil portion 325. The heating of article 100 is primarily provided by magnetic fields produced by first lateral portion 370 and second lateral portion 375, and the respective ends of upper coil portion and lower coil portion when induction coil 300 is energized. Both upper coil portion 355 and lower coil portion 325 must be sized so as to receive article 100, such as differential housing 200, without interference while maintaining close proximity to permit coupling of the magnetic fields produced by first lateral portion 370, second lateral portion 375 and the respective ends of upper coil portion 355 and lower coil portion 325 to the surface of article 100. In the case of differential housing 200, the spacing was about 13 cm. The spacing of upper coil portion 355 and lower coil portion 325, and the respective lengths of first lateral portion 370 and second lateral portion 375 must be adapted depending on the design of differential housing 200 and the desired length or size of heat treatment portion 245.

Please replace paragraph [0033] with the following amended paragraph:

[0033] As shown in FIGS. 6 and 7, first termination portion 310 and second termination portion 315 are adapted to connect inductive coil 300 to a power supply (not shown). While the arrangement of elements is provided to illustrate an embodiment of induction coil 300, the coil is not limited to the particular embodiment shown. For example, first termination portion 310 and second termination portion 315 could possibly also be incorporated into upper coil portion 355 rather than lower coil portion 325, with a corresponding rearrangement of the other elements of induction coil 300. Referring again to FIGS. 6 and 7, induction coil 300 may comprise any suitable size, cross-sectional shape and composition, depending on the exact nature of article 100 that is to be used therewith. However, in the case of differential housing 200, the spacing of the first and second upper lateral ends ~~315~~ 360 and ~~320~~ 365 of upper coil portion ~~325~~ 355 was about 13 cm and comprised a hollow, rectangular, 99% copper tube 116 having an external width of 10 mm and an external height of 10 mm, and sidewall thickness of 1.1 mm. Induction coil 300 must be adapted so as to receive article 100, while preferably maintaining as close a spacing as is practicable, so as to maximize the inductive coupling with article 100 when induction coil 300 is energized, and yet not interfere with the rotation of article 100, as discussed herein. Induction coil 300 is preferably adapted so that longitudinal axis 225 of article 100 may be easily aligned to be parallel to and coincident with longitudinal axis ~~305~~ 385. Induction coil 300 also preferably comprises quench blocks 380 as shown in phantom in FIGS. 6 and 7. Quench blocks 380 are connected to known means for providing a quenchant, such as a storage tank or supply line, and includes a plurality of openings through which quenchant may be sprayed onto article 100, as described below.